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FIG. 1A

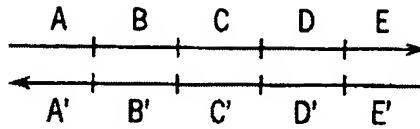


FIG. 1B

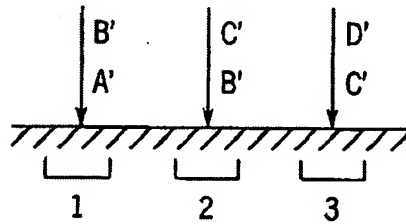


FIG. 1C

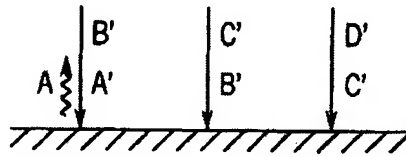


FIG. 1D

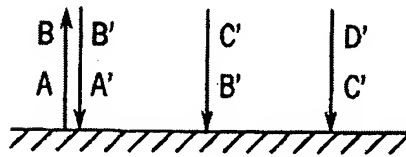


FIG. 1E

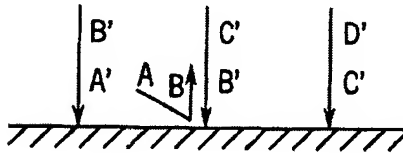


FIG. 1F

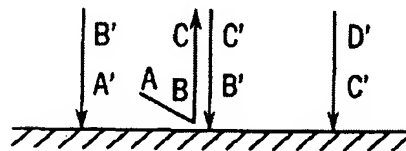


FIG. 2A

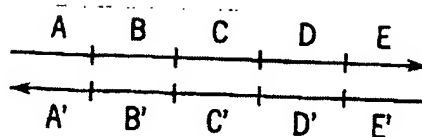


FIG. 2B

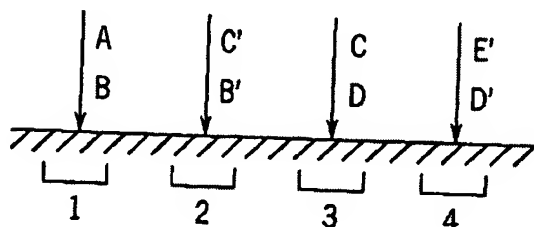


FIG. 2C

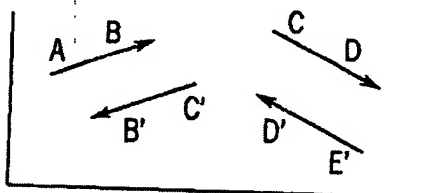


FIG. 2D

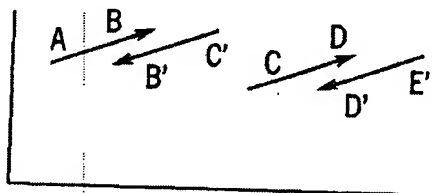


FIG. 2E

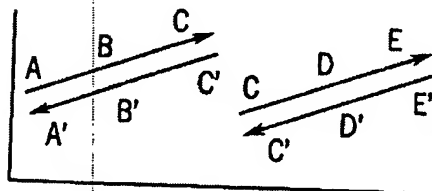


FIG. 2F

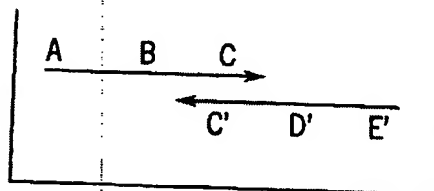


FIG. 2G

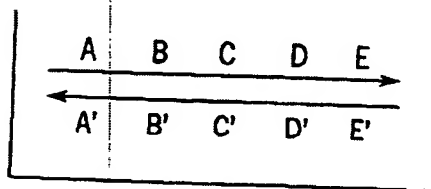


FIG. 3A

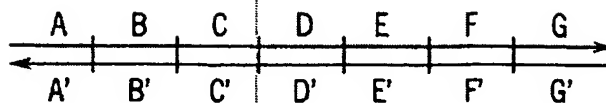


FIG. 3B

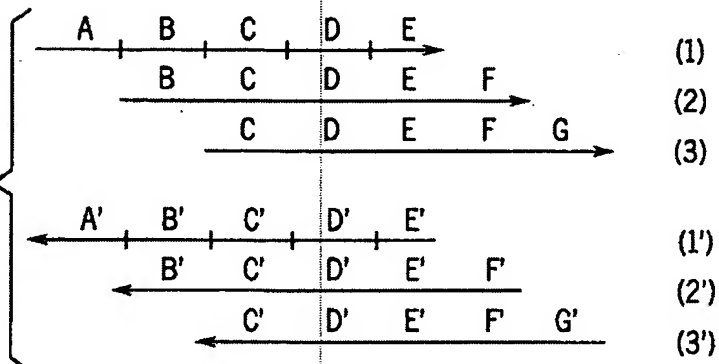


FIG. 3C

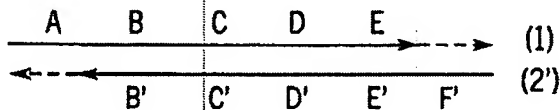


FIG. 3D

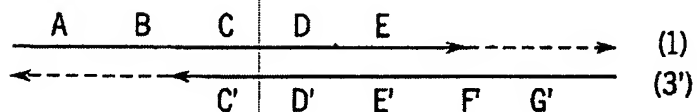


FIG. 4

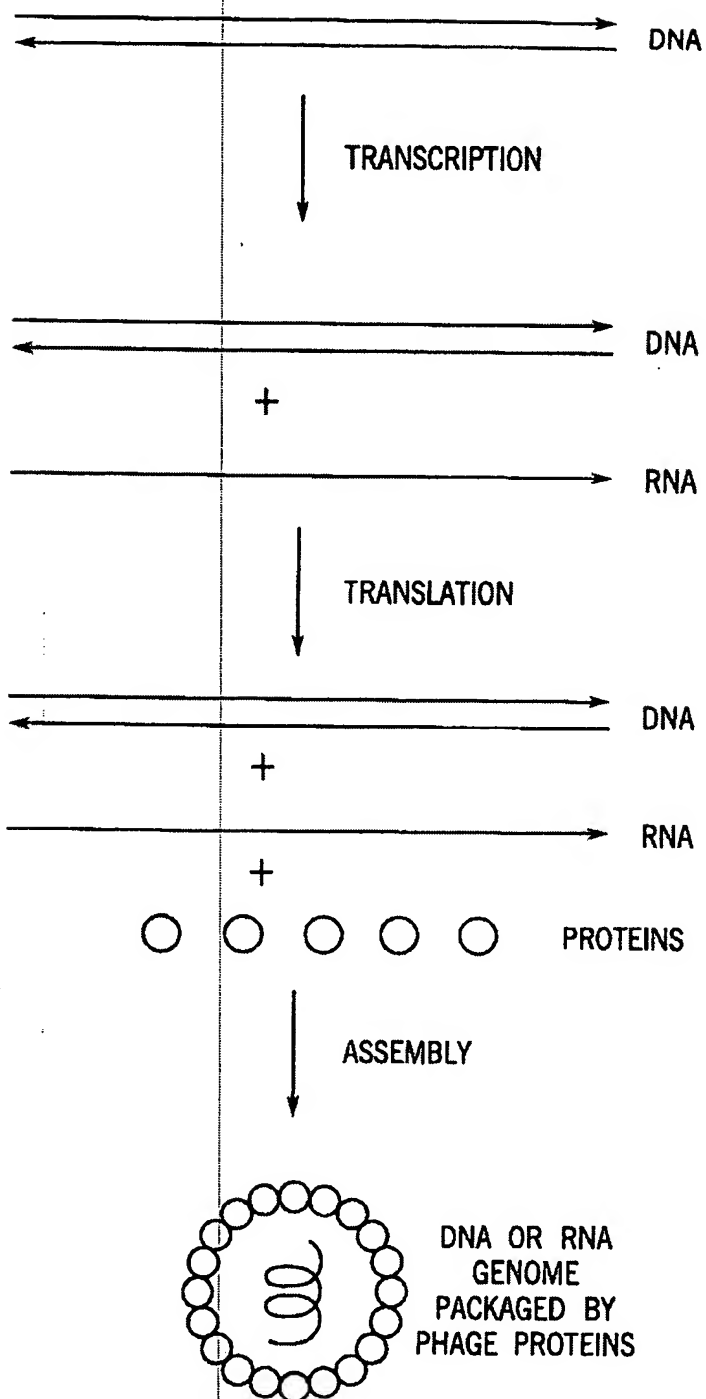


FIG. 5

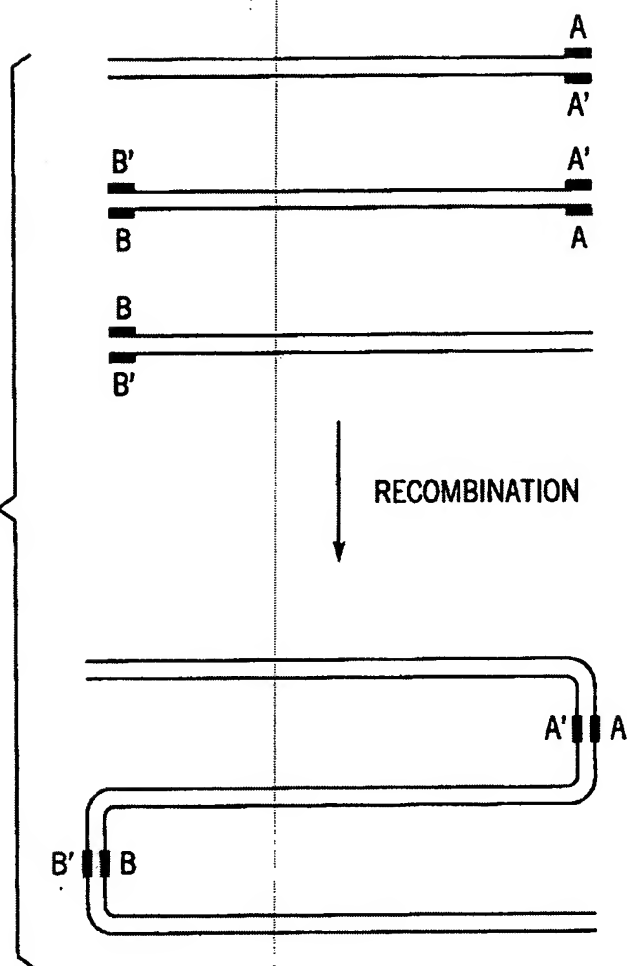
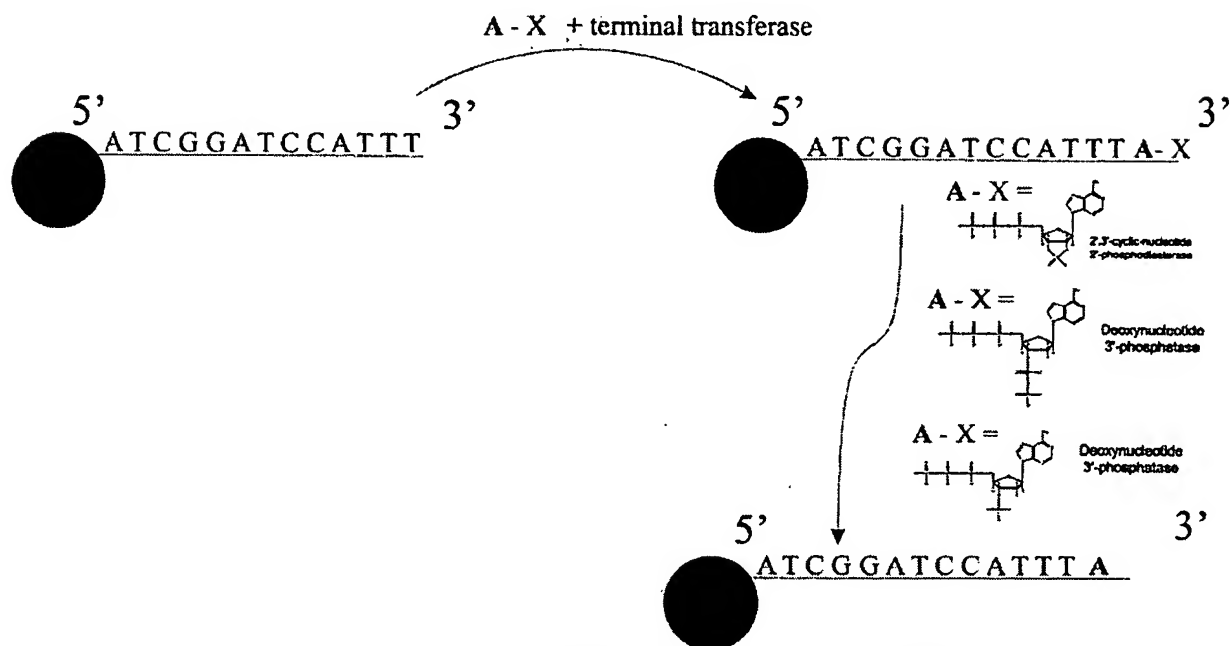


Figure 6A

Single strand oligonucleotide synthesis with phosphate or derivative capping group



Single or double strand oligonucleotide synthesis with carbohydrate or peptide capping group.

Figure 6B

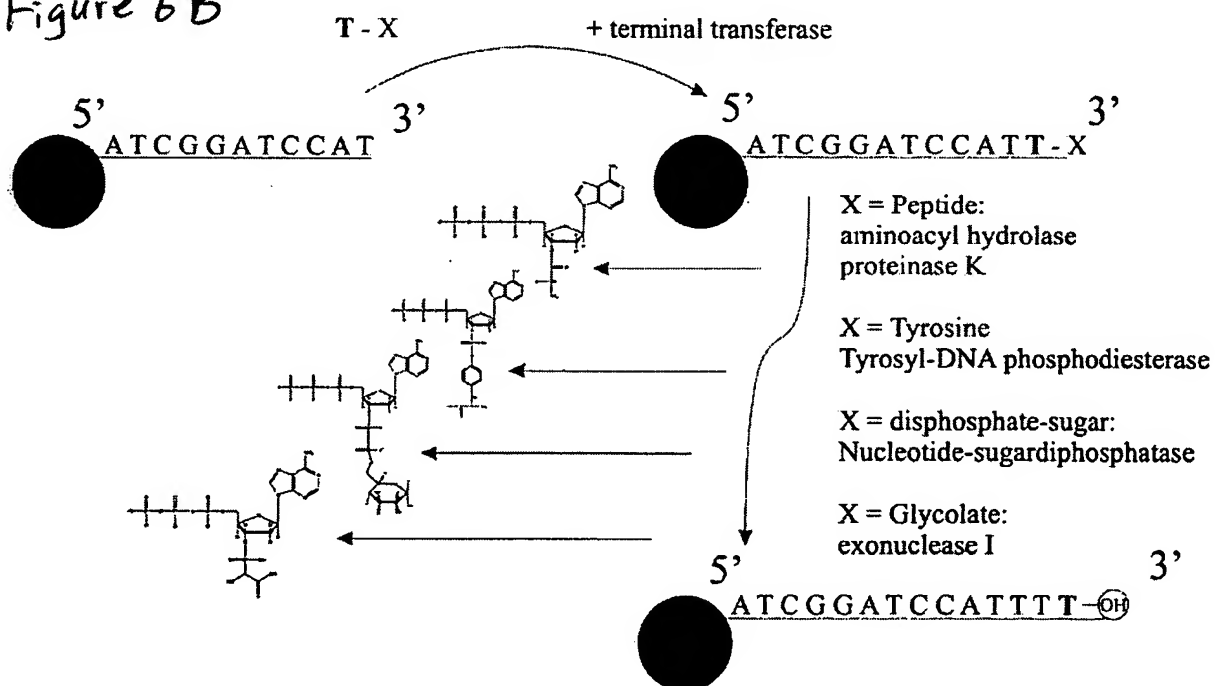
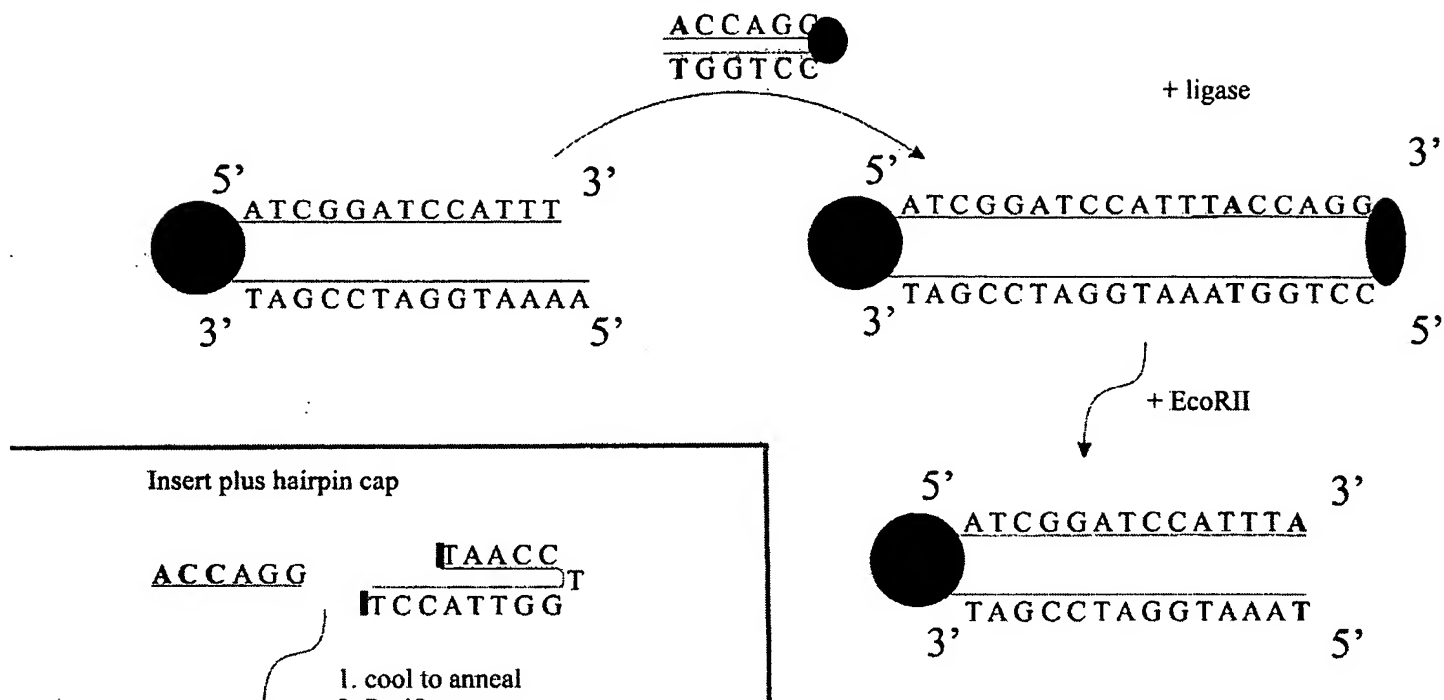


Figure 7

Double stranded oligonucleotide synthesis with restriction site oligonucleotide cap.



Insert plus hairpin cap

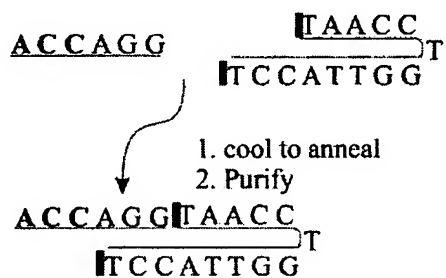


Fig 8A

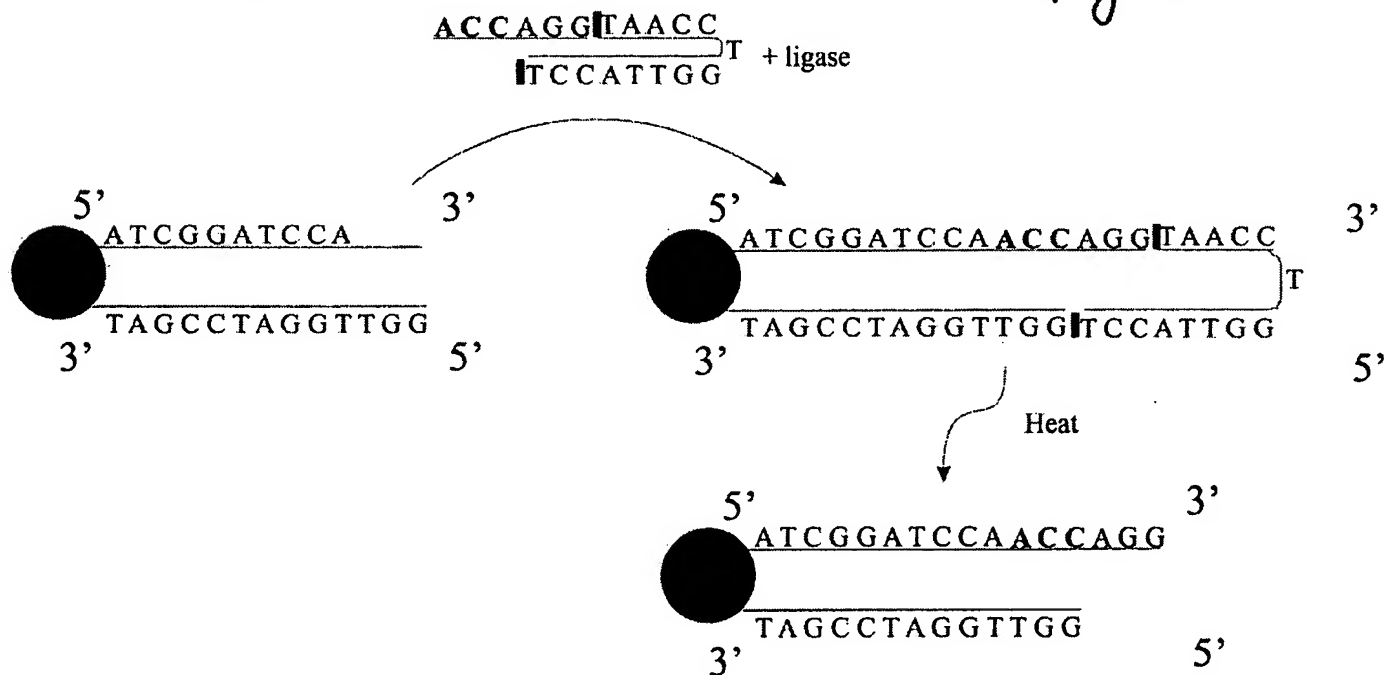
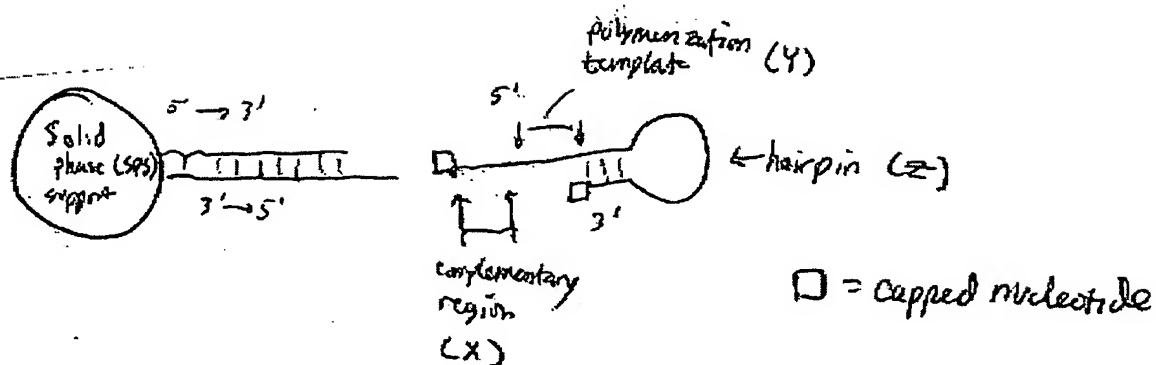
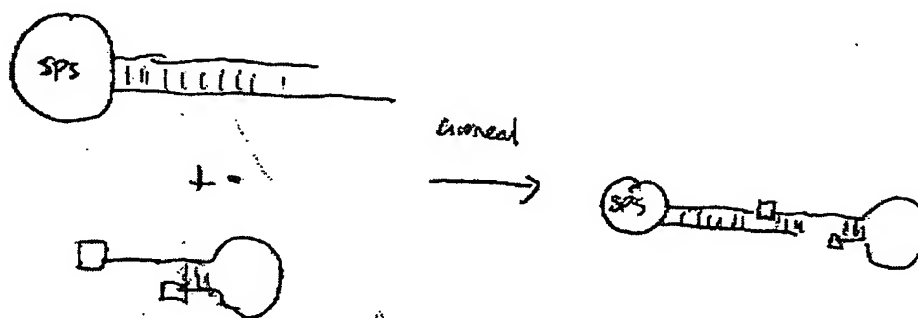


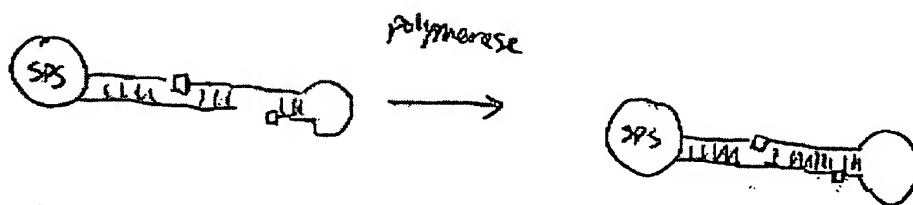
Figure 8B



Step 1



Step 2



Step 3

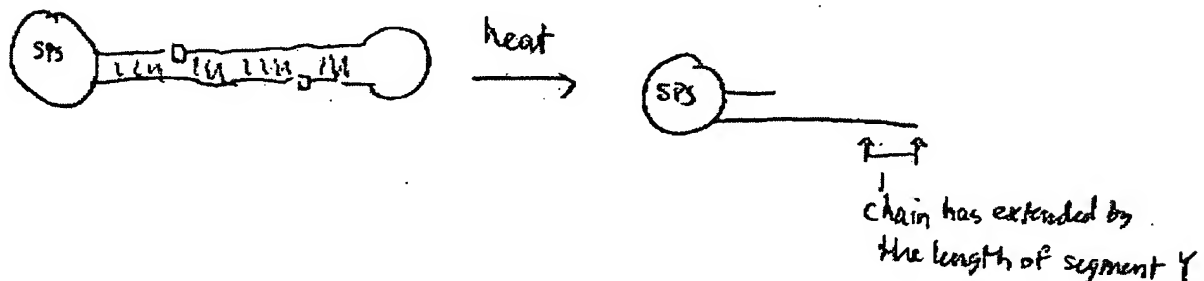
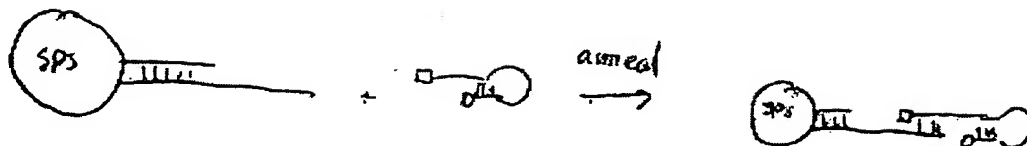
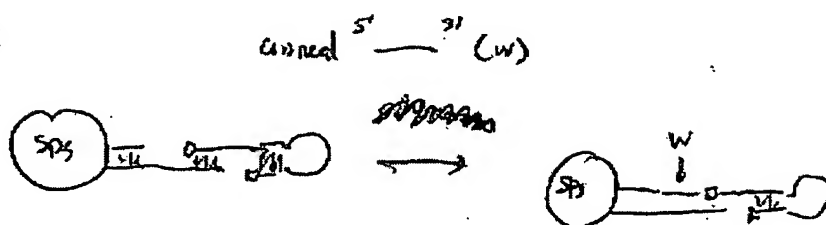


Figure 8C

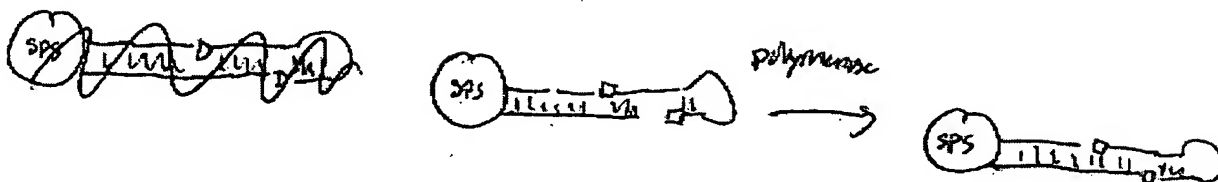
Step 1



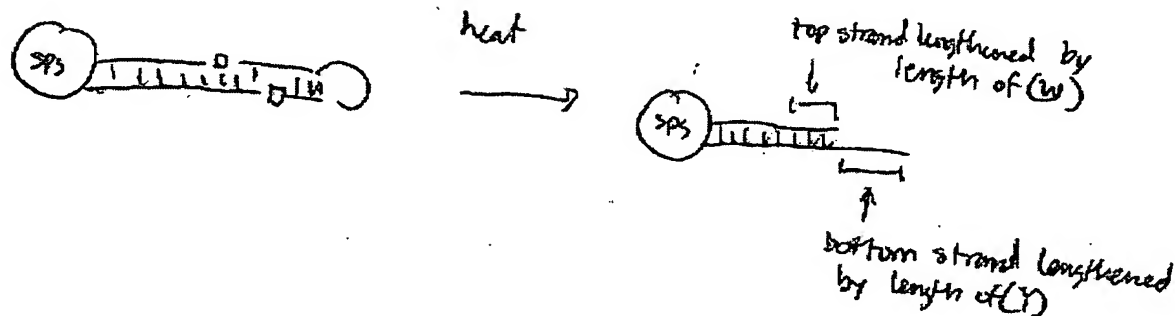
Step 2



Step 3



Step 4



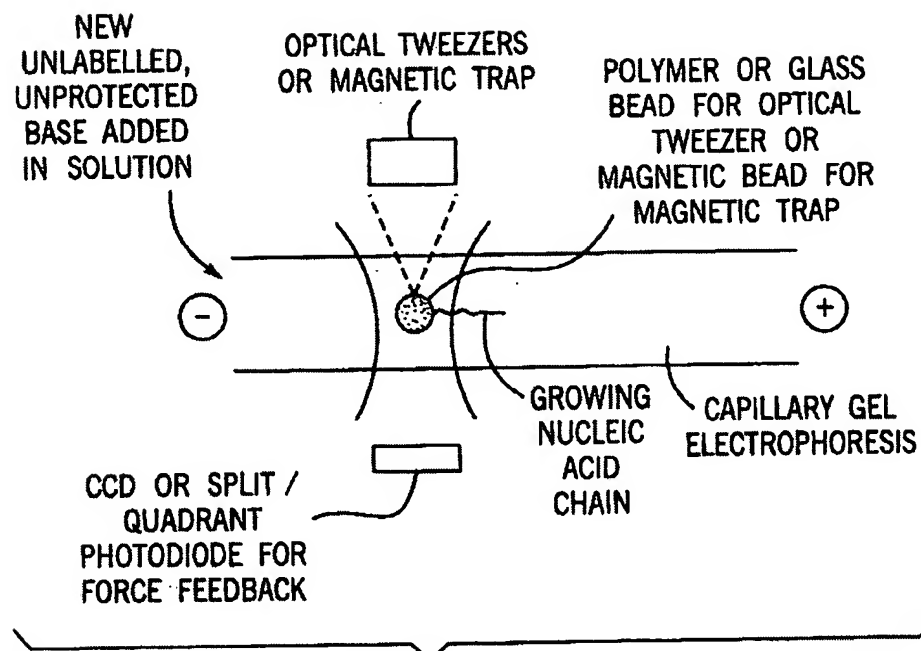


FIG. 9A

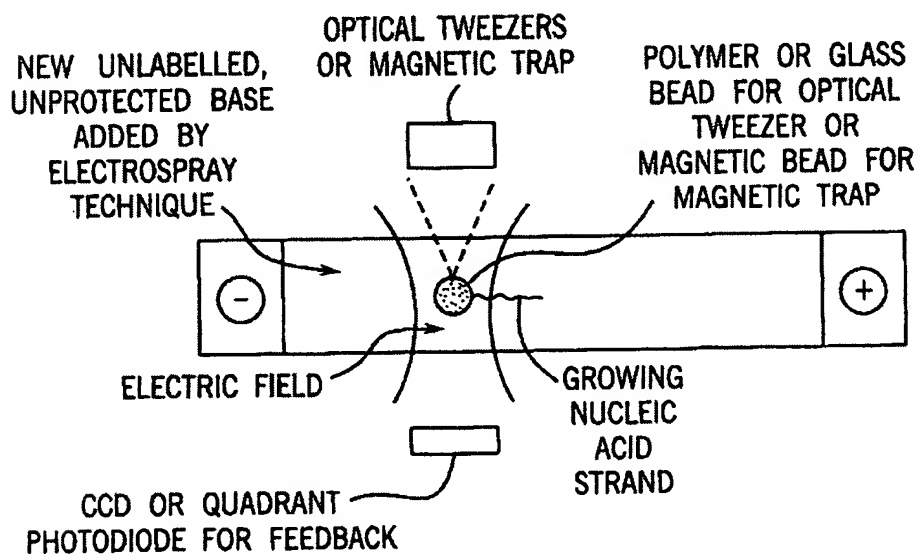


FIG. 9B

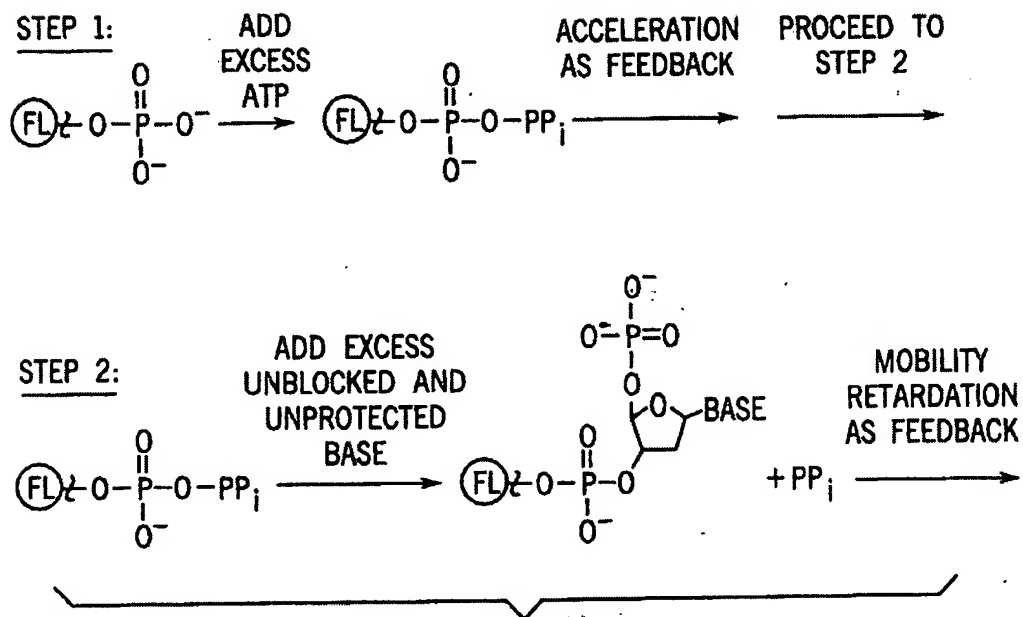
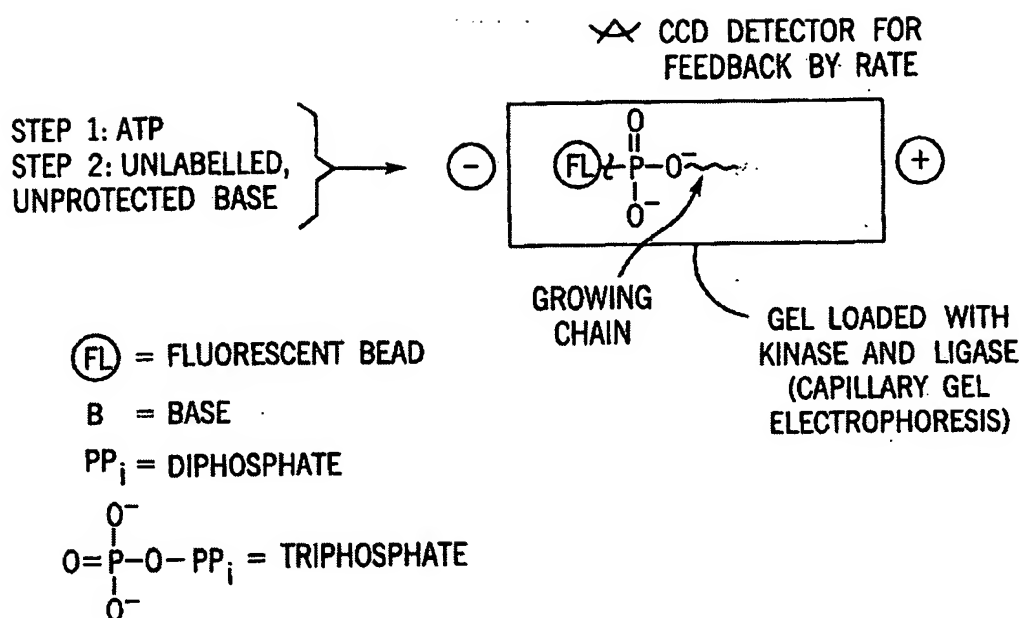


FIG. 10

Figure 11A

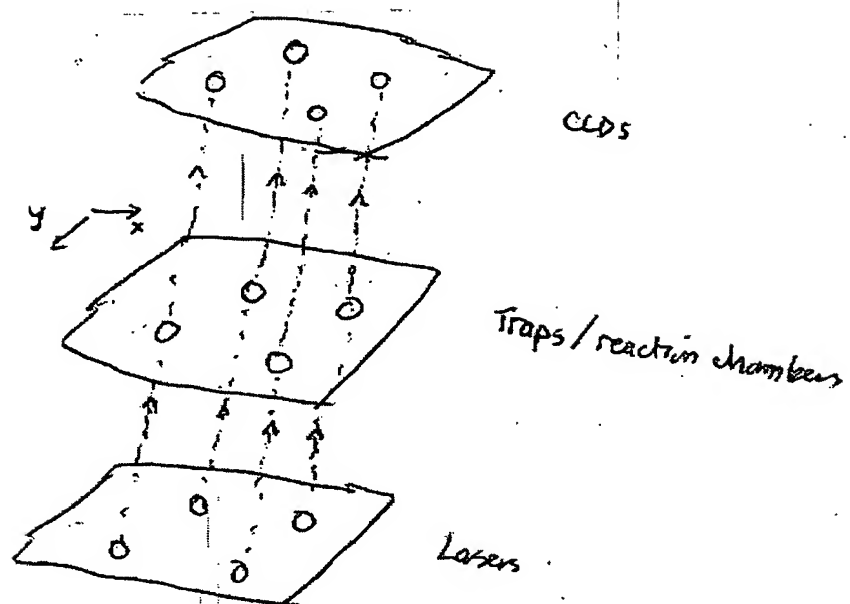


Figure 11B

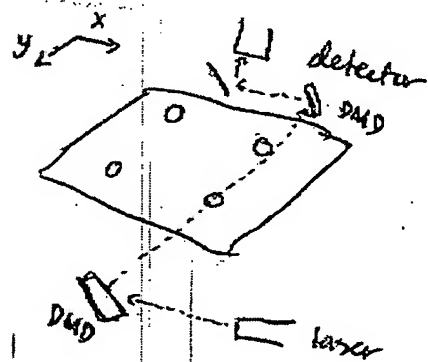


Fig. 12A

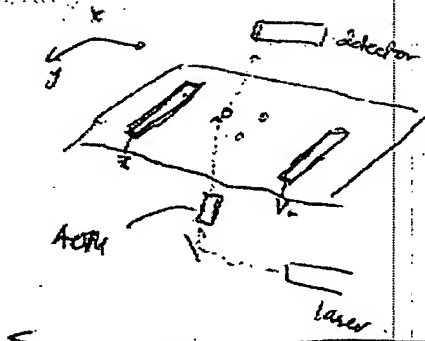


Fig 12B

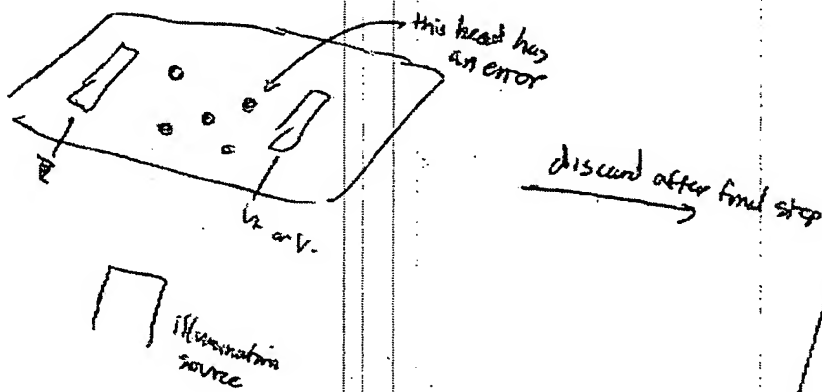
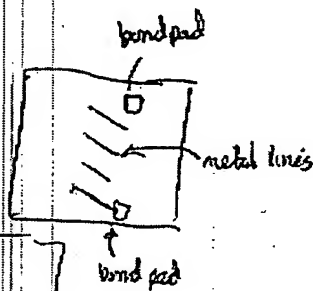
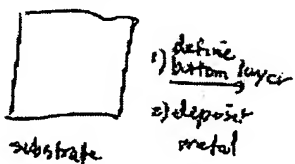
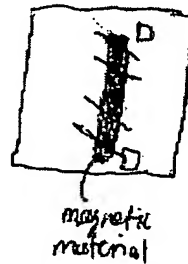


Fig 13A

top down view

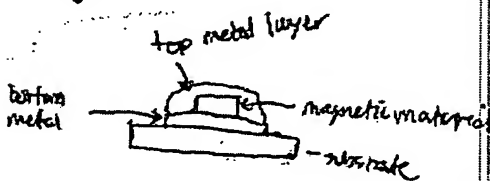


- 3) define magnetic core
- 4) deposit core



- 5) define metal layer
- 6) deposit metal layer

Fig 13B



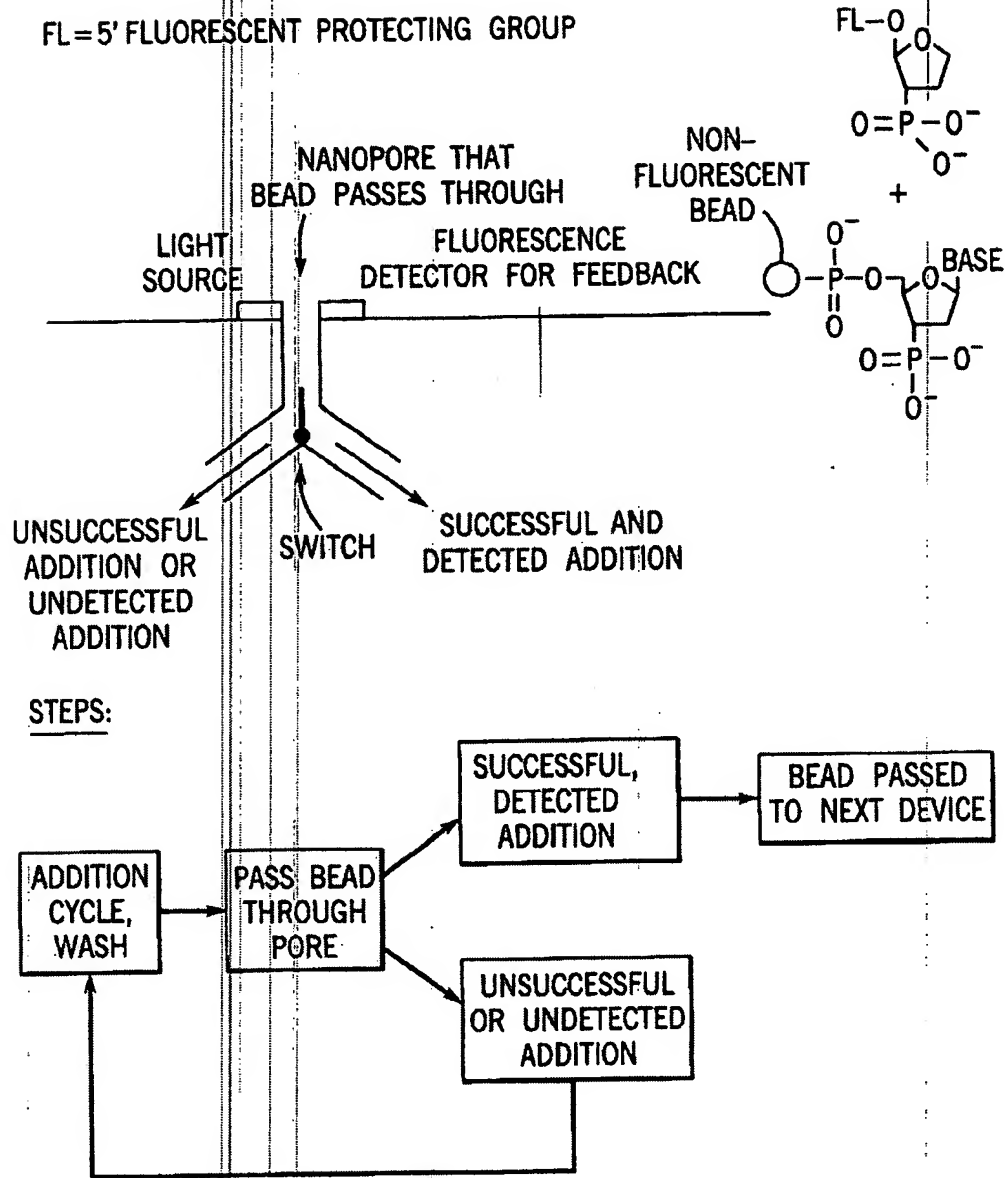


FIG. 14A

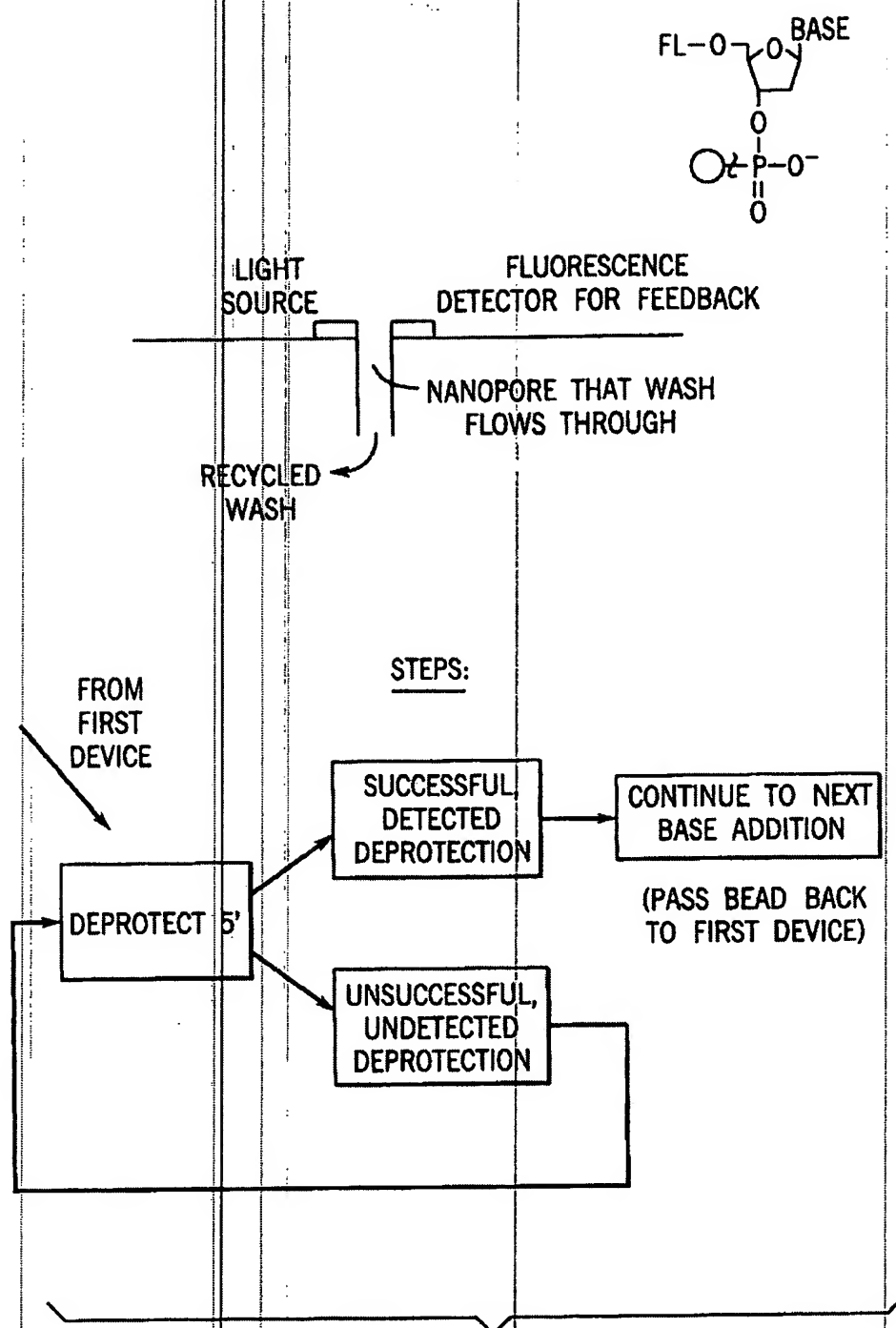


FIG. 14 B

Figure 15A

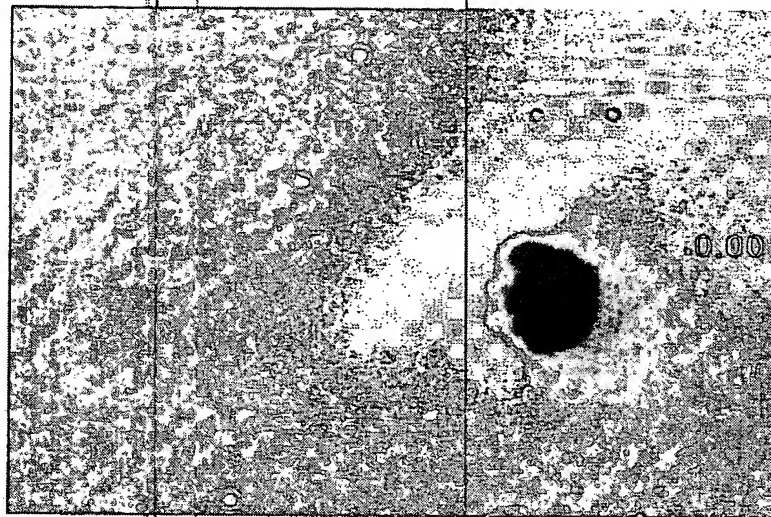


Figure 15B

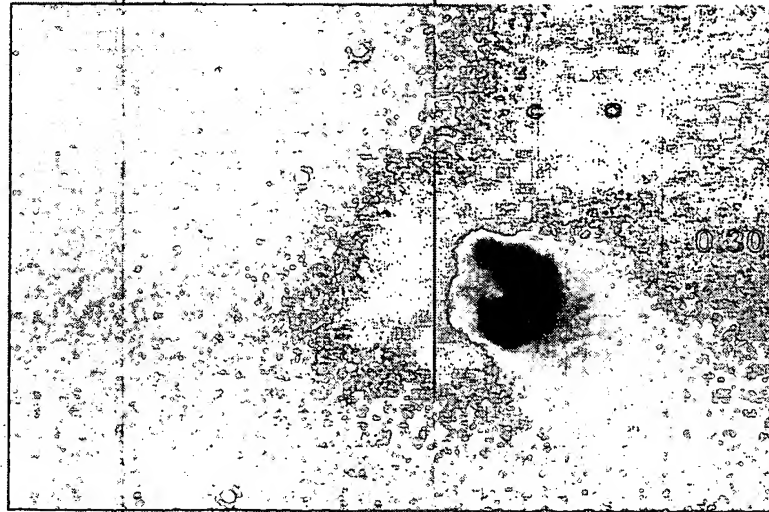


Figure 15C

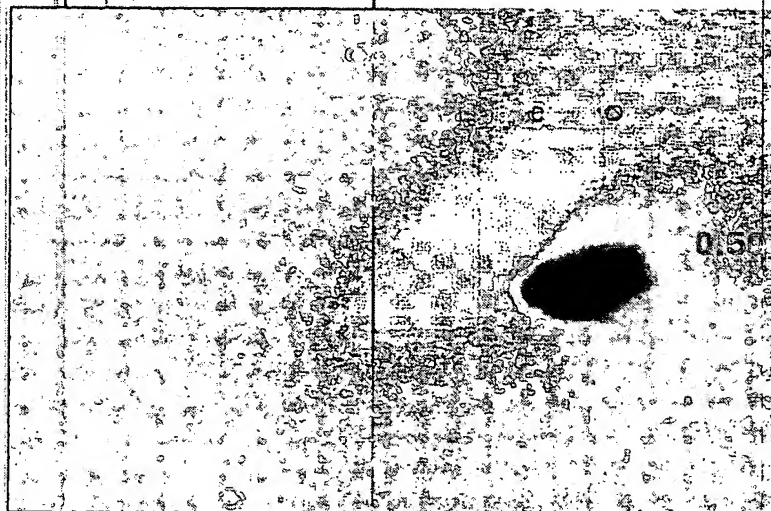


Figure 15D

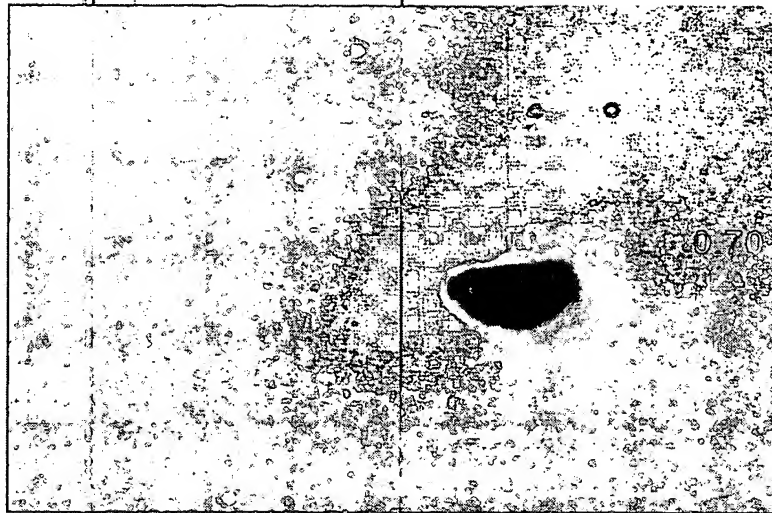
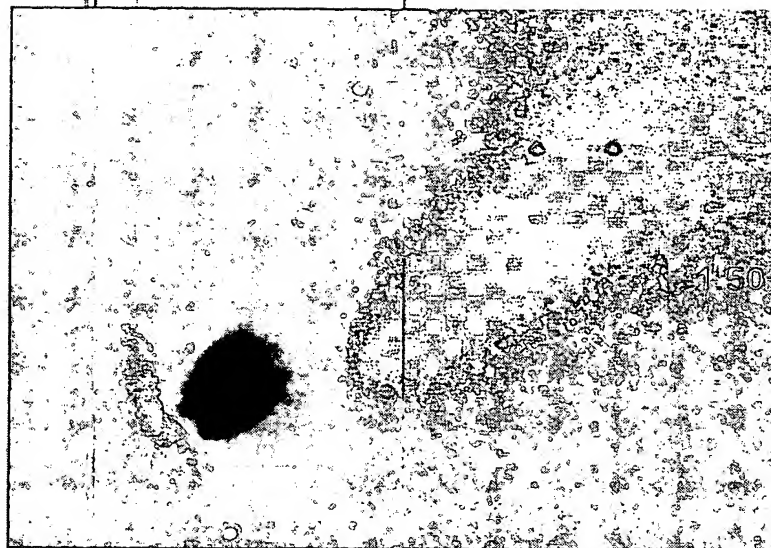


Figure 15E



Top down

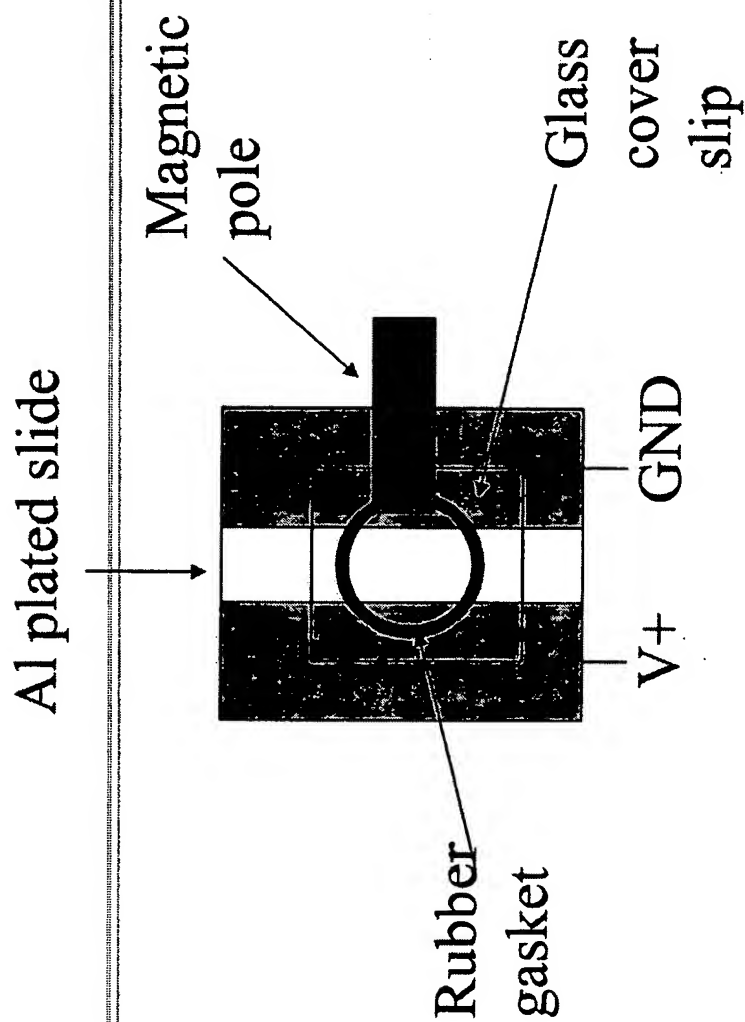


Figure 15F

Side view

Fig. 15G

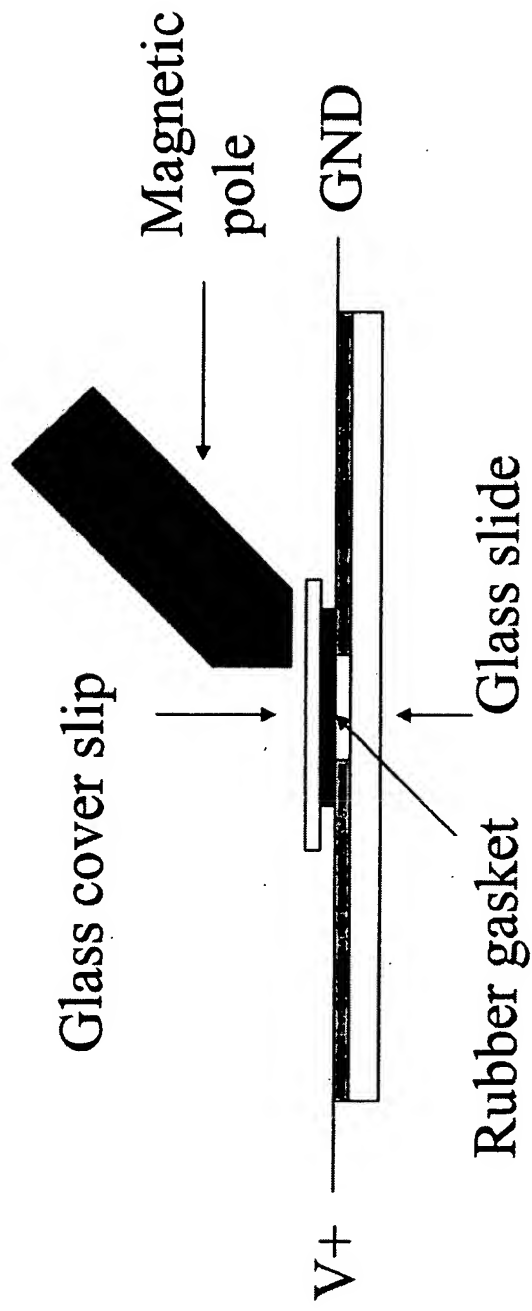


FIG. 16A

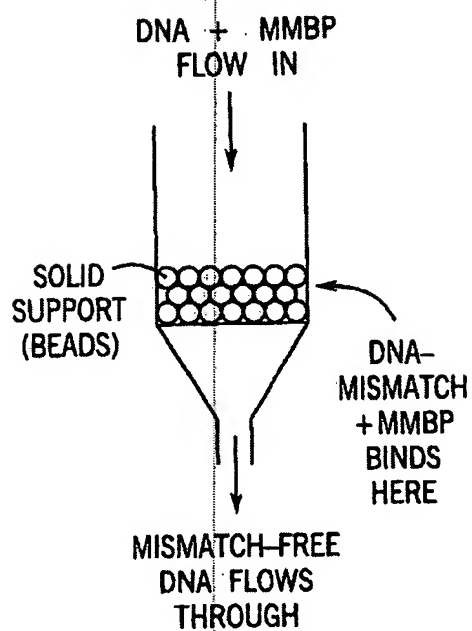
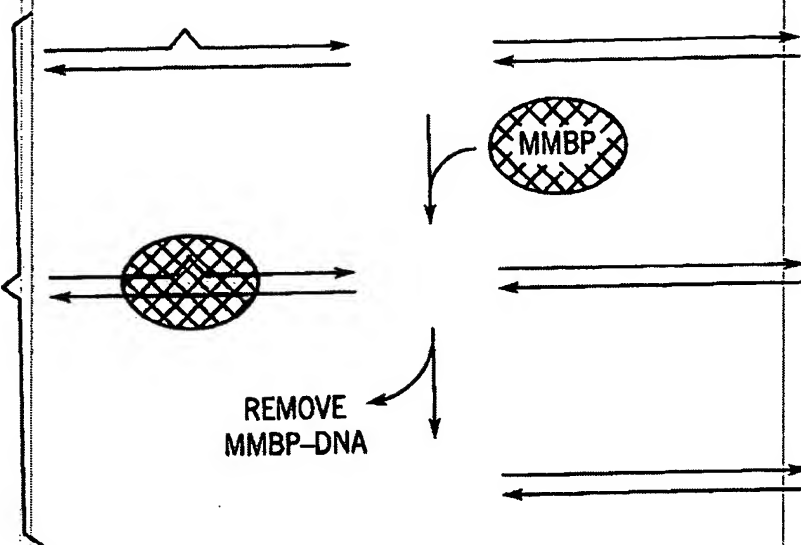


FIG. 16B

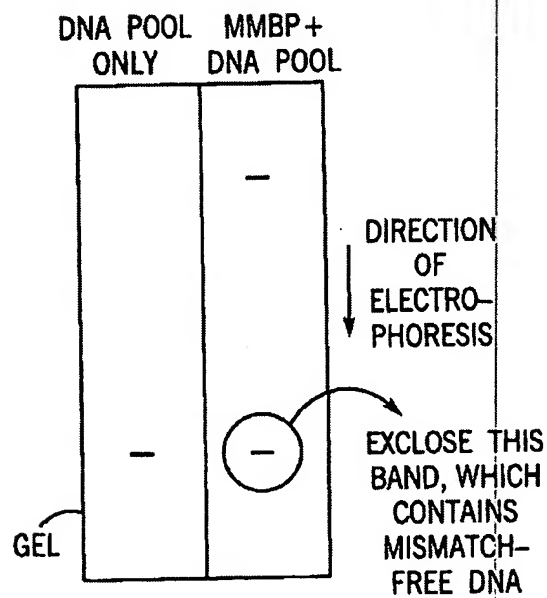


FIG. 16C

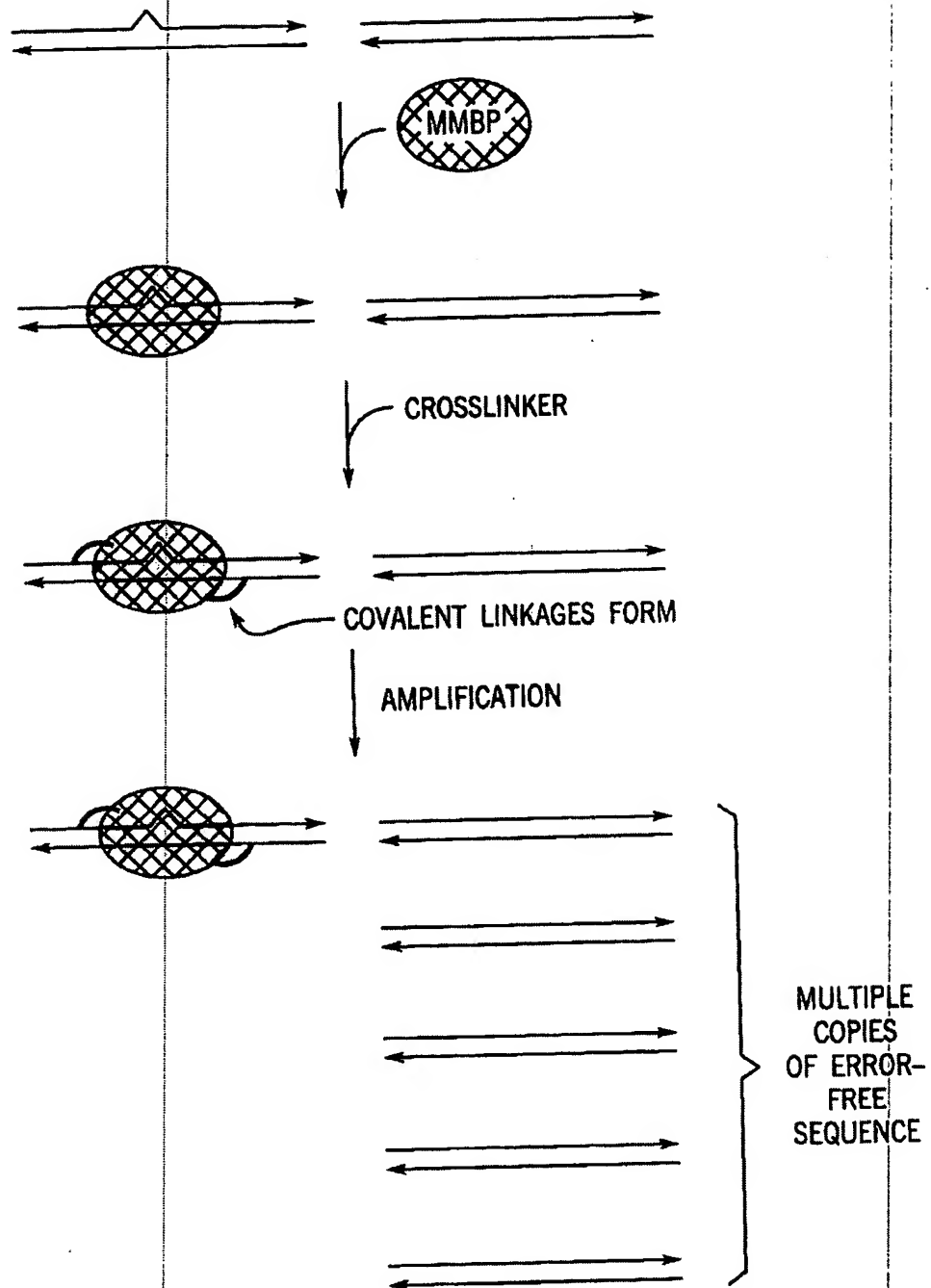


FIG. 17

FIG. 18

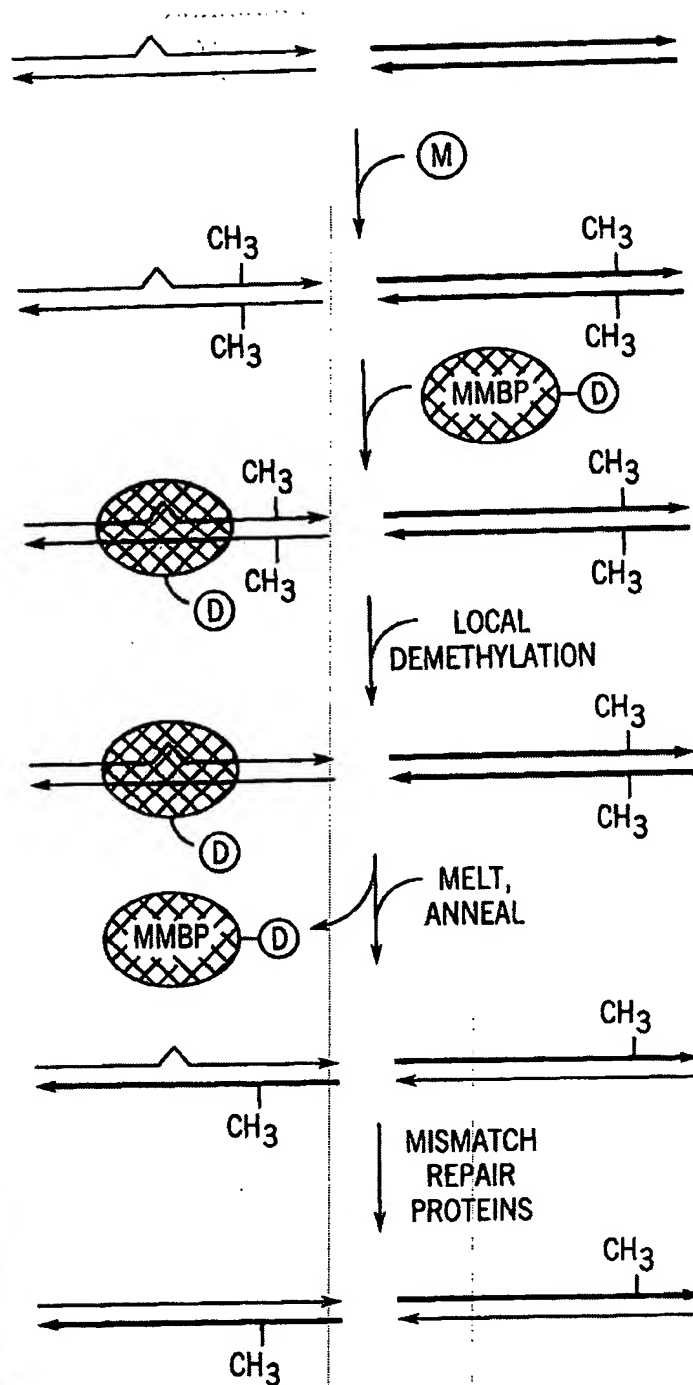


FIG. 19

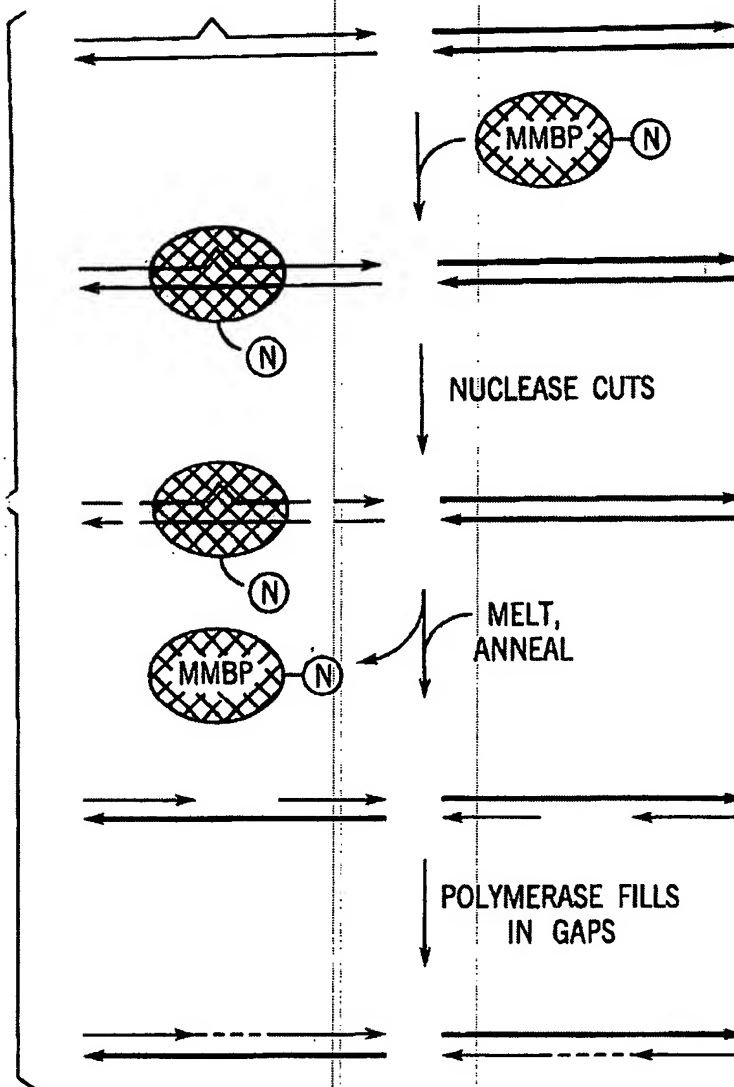
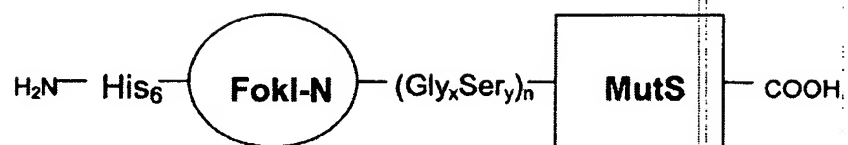


Figure 20

A)



B)

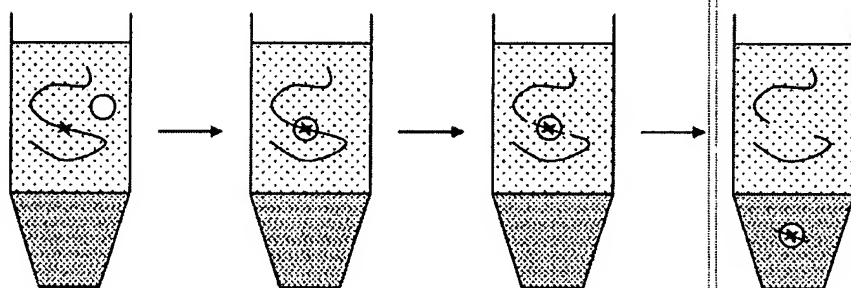


FIG. 21A

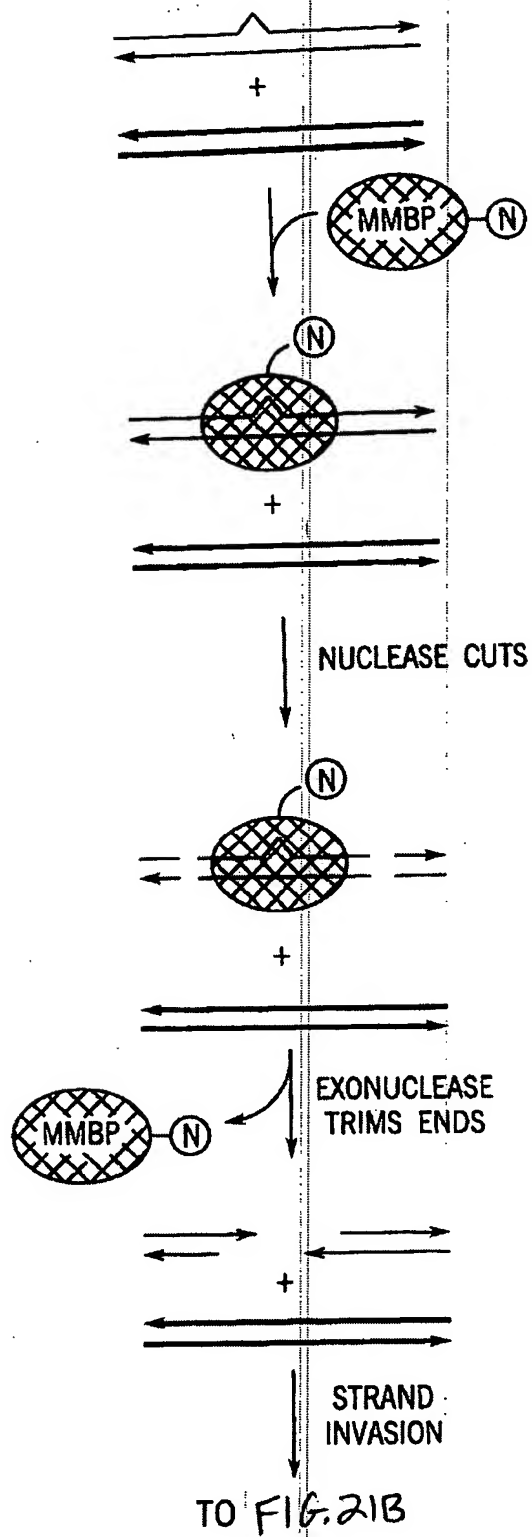
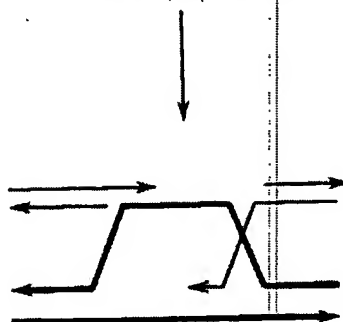
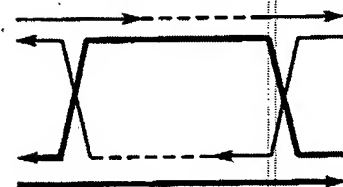


FIG. 21B

FROM FIG. 21A



DNA SYNTHESIS,
BRANCH MIGRATION



RESOLUTION

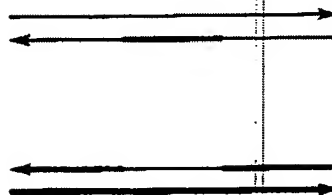


FIG. 22

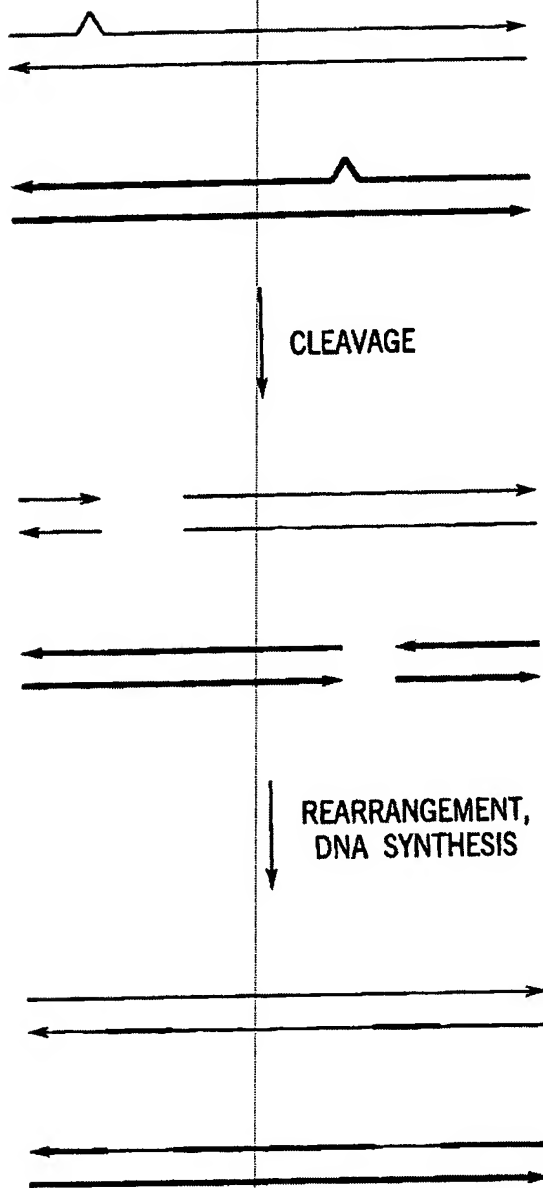
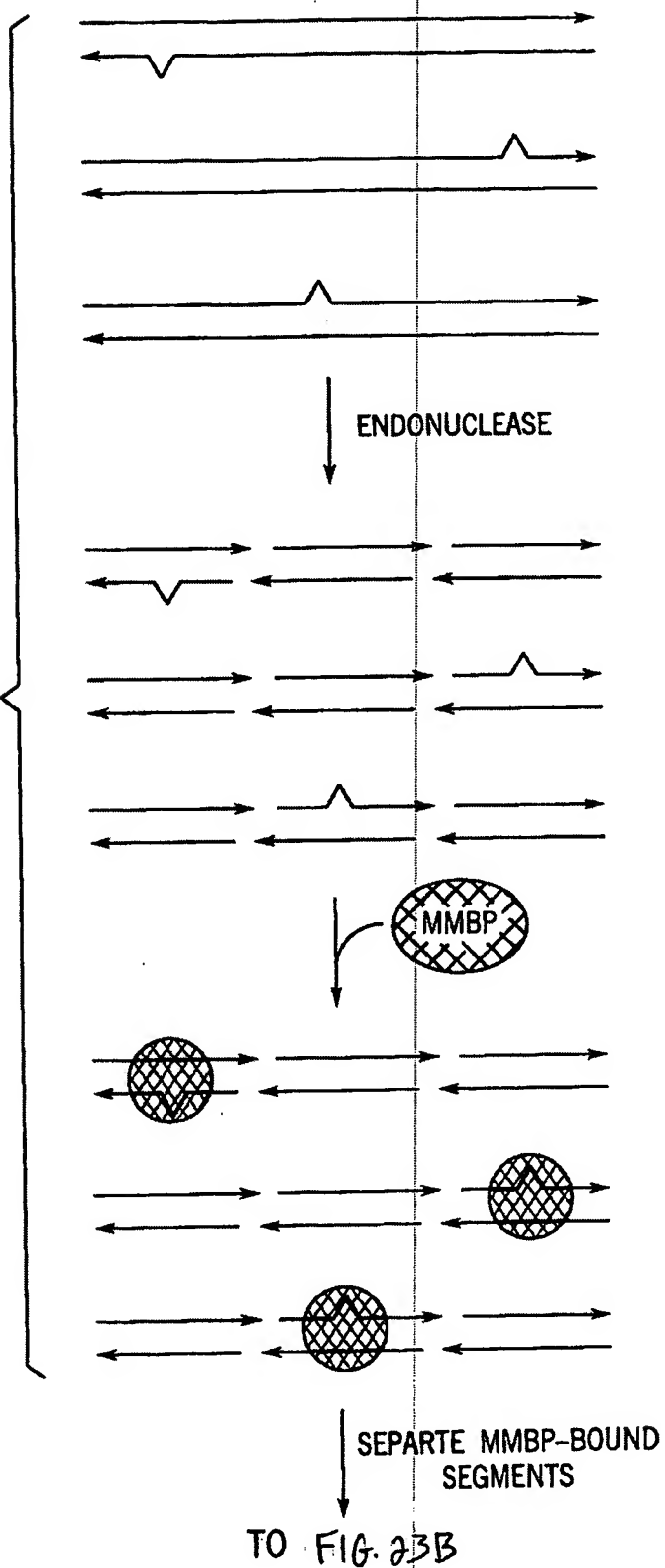


FIG. 23A



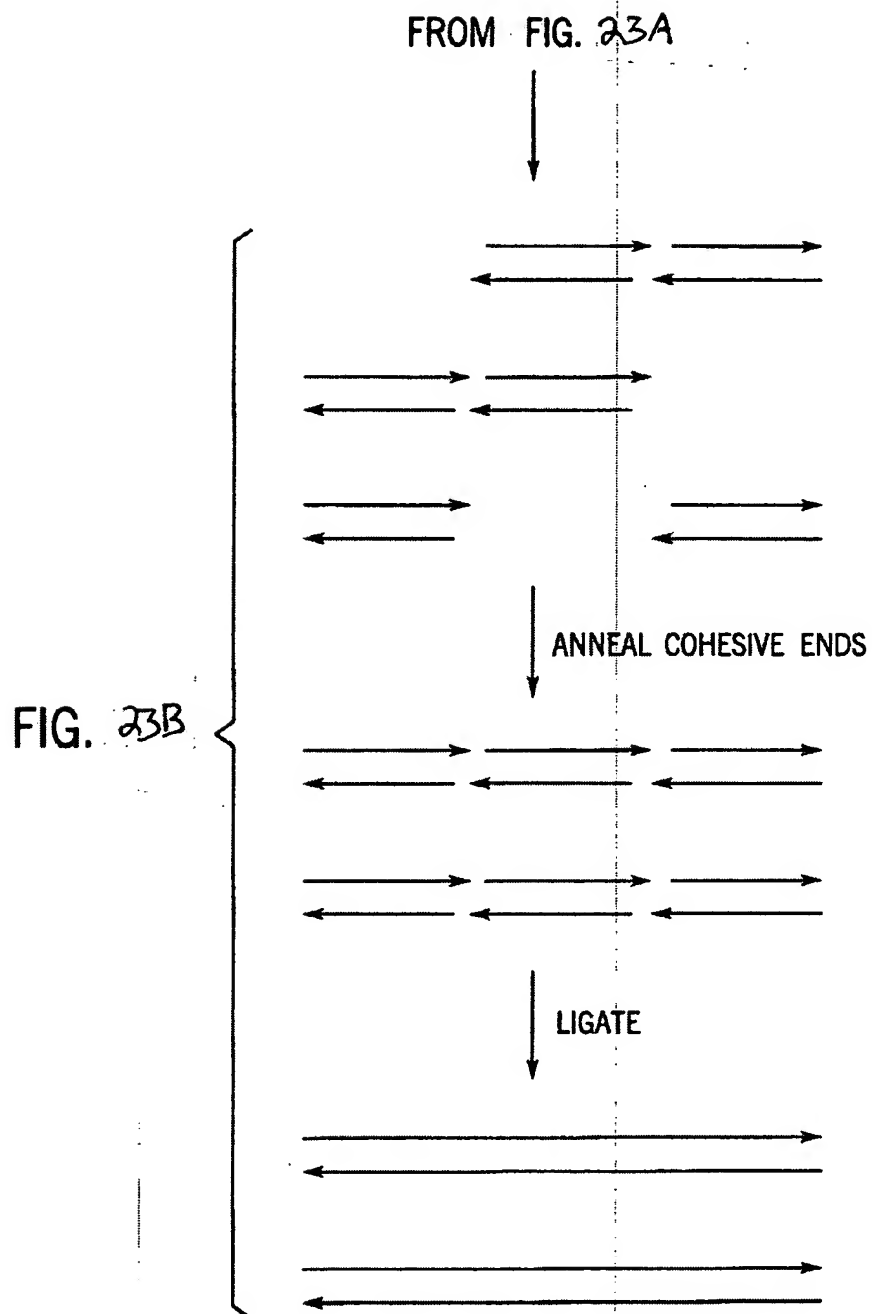


FIG. 24

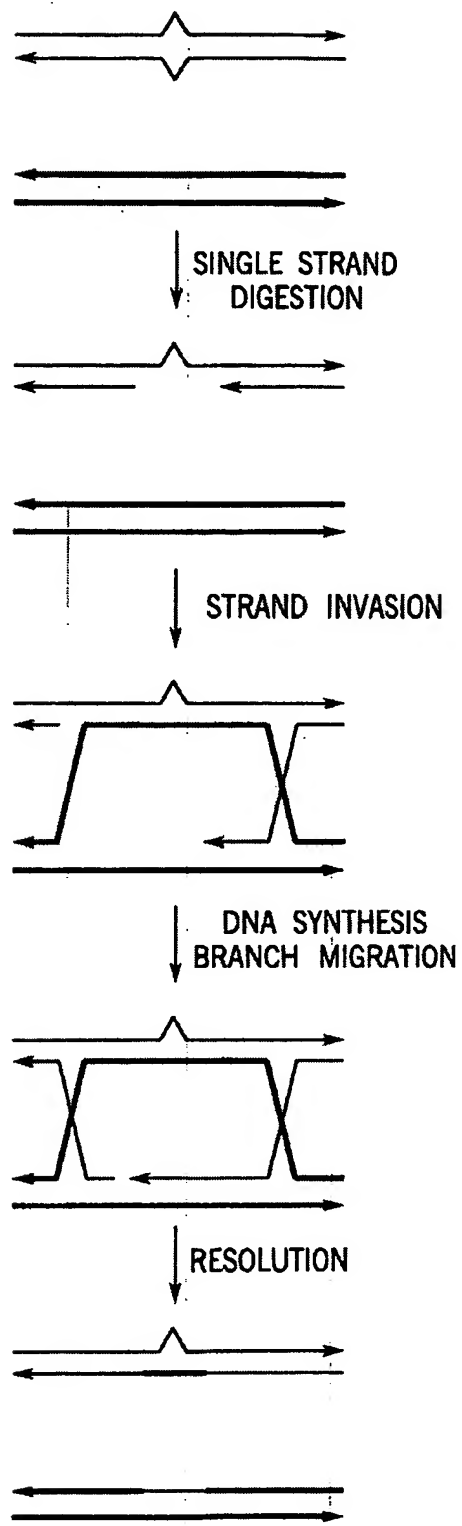


Figure 25

